

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1-2. (Cancelled).

3. (Currently Amended) A process for producing propylene oxide, which comprises the following steps:

oxidation step: a step of obtaining cumene hydroperoxide by oxidizing cumene;

epoxidation step: a step of obtaining propylene oxide and cumyl alcohol by reacting cumene hydroperoxide obtained in the oxidation step with propylene;

dehydration step: a step of obtaining α -methylstyrene by dehydrating cumyl alcohol obtained in the epoxidation step in the presence of ~~a dehydration catalyst~~activated alumina wherein a concentration of propylene oxide in cumyl alcohol is 0 to 10,000 ppm by weight; and

hydrogenation step: a step of hydrogenating α -methylstyrene in the presence of a hydrogenation catalyst to convert into cumene and recycling said cumene to the oxidation step;
~~wherein the dehydration step comprises the process of claim 1.~~

4. (New) The process according to claim 3, wherein the concentration of propylene oxide is 0 to 5,000 ppm by weight.